

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	<b>BRIDGE INSPECTION REPORT</b> <b>B08202021-8</b>	
<b>Date:</b> 8/12/2021	<b>Inspected By:</b> Mike Button	<b>Category:</b> Office - Bridge Office	
<b>BRIDGE INFORMATION</b>			
<b>Site:</b>	1-308 - LOWER GULLIES RIVER BRIDGE		
<b>Route:</b>		<b>Overall Length:</b>	10.5 m
<b>Year Built:</b>	1925	<b>Est:</b> No	<b>Overall Width:</b> 10.2 m
<b>Year Last Rehab.:</b>		<b>Est:</b> No	<b>Roadway Width:</b> 9.4 m
<b>Region:</b>	AVALON PENINSULA	<b>Sidewalk Width:</b>	0 m
<b>Jurisdiction:</b>	Provincial	<b>Clearance to R.D. or N.W.L.:</b>	2 m
<b>Type of Structure:</b>	04 - Rigid Frame	<b>Max Depth of N.W.L.:</b>	0.5 m
<b>Purpose of Structure:</b>	04 - Over Non-Navigable Waters		
<b>Type of Handrail:</b>	01 - Aluminum Rail	<b>Spans:</b>	
<b>Roadway Surface:</b>	02 - Asphalt	<u>Span No.:</u>	<u>Length</u>
<b>Alignment Vertical:</b>	01 - Good	1	5.2
<b>Alignment Horizontal:</b>	01 - Good	2	0
<b>Restrictions:</b>	No	3	0
		<u>Span No.:</u>	<u>Length</u>
		4	0
		5	0
		6	0
<b>BRIDGE PHOTOS</b>			
			
<b>SUBSTRUCTURE</b>			
<b>Condition:</b>	P1 - Poor	<b>Bearings:</b>	I - Inapplicable
		<b>Bearing Seat:</b>	I - Inapplicable
<b>Comments:</b>	- Abutment wingwalls have extreme disintegration continuing into deck fascias. - Large beach rock used as filler. - No evidence of rebar. - Southeast wingwall is in the worst condition, northeast has severe AAR/alligator cracking with efflorescence & spalling. - Northeast end wall detached from structure & is settling due to erosion. - Both abutment faces have heavy cracks in both the vertical & horizontal directions. Some superficial but others go all the way through the concrete and on 45 & 60deg angles, likely shear cracks. - South abutment has a large erosion hole in the footing with cracks propagating from it vertically. Poor construction techniques likely contributed to the issue. - Wingwall construction joints opening up at various locations.		
<b>SUPERSTRUCTURE</b>			
<b>Condition:</b>	P - Poor	<b>Expansion Joints:</b>	U - Uninspectable
<b>Comments:</b>	- Underside of deck has mild-medium cracking in all directions with light efflorescence and possible AAR (P3). - Longitudinal steel beams starting to show themselves in the cover zone through rust staining (P3). - Poor (P)		

fascia & underside of deck intersection, see note on upstream fascia in "Deck" section of report.

**DECK**

<b>Condition:</b>	P1 - Poor	<b>Curbs:</b>	P3 - Poor
<b>Hand Rail:</b>	P - Poor	<b>Roadway Condition:</b>	P3 - Poor
<b>Approach Rail:</b>	I - Inapplicable		
<b>Comments:</b>	- Denting & twisting in handrail. Northwest rail disconnected. Posts twisted & bent. - Asphalt has light rutting with some potholes/pooling of water. Cracking over expansion joints visible. - Downstream fascia has severe spalling/disintegration. All aggregate is beach rock with large cobbles. - Embedded transverse steel beam ends visible with medium corrosion. - Upstream fascia has extreme disintegration with the first longitudinal beam entirely visible with medium corrosion. Transverse beams also showing. No evidence of rebar in concrete. Upstream fascia Poor (P). - No approach/exit rail, end blocks, hazard markers or deck drains.		

**HYDROLOGY**

<b>Water Velocity:</b>	0 m/s	<b>Ice Problem:</b>	N - No Problem
<b>Water Depth:</b>	0 m	<b>Scour Problem:</b>	P - Possible Problem
<b>Waterway:</b>	01 - Adequate	<b>Debris Problem:</b>	N - No Problem
<b>Comments:</b>	- Slope erosion evident on northeast side of structure. Hole between abutment and end wall 0.3mx0.3m. - Rip-rap on upstream side has shifted but still appears effective.		

**REPLACEMENT/REHABILITATION**

<b>Next Rehab. Date:</b>		<b>Replacement Year:</b>	2024
<b>Antic. Rehab. Cost:</b>	\$0	<b>Replacement Cost:</b>	\$0
<b>Recommendations:</b>	- Replace structure.		

**OBSERVATIONS**

<b>Overall Condition:</b>	P1 - Poor	<b>Requires Further Inspection:</b>	Yes
<b>Additional Observations:</b>	- Replace structure within a couple years. Recommend inspection every year until replacement. Hazards: Heavy traffic, steep slopes, vegetation growth on downstream side. - Marked as P1, sections are (P) but not structural ie. upstream fascia		

**LEGEND:**

**Condition Definitions:**

- 1 - \*Good - [discontinued code].
- 2 - \*Fair - [discontinued code].
- 3 - \*Poor - [discontinued code].
- 4 - \*Unsafe - [discontinued code].
- G - Good.

- F2 - Fair.
- F1 - Fair.
- P3 - Poor.
- P1 - Poor.
- P - Poor.

- C - Unsafe (Closed to Public).
- U - Uninspectable.
- I - Inapplicable.

**Problem Definitions:**

- N - No Problem.
- P - Possible Problem.
- K - Known Problem.
- NA - Not Applicable.

**Category Definitions:**

- Maint. - Maintenance.
- Eng. - Engineering.
- Office - Bridge Office.

**PHOTO GUIDELINES:**

**Inspection Photos:**

- Please provide photos using guidelines below:
- Any item which inspector feels should be documented by photograph
  - All items noted above as being P3, P1, P, or C
  - Any evidence of known ice, scour, debris, waterway problems

**INSPECTION PHOTOS**